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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A fabrication method of a liquid crystal display device, comprising:

providing a substrate;

providing a thermal transfer injection nozzle including a resist storing layer for storing an injected resist, a thin film resistor for heating a thin-deposited resist electrically, a vapor heated by the thin film resistor ~~and injecting a resist~~, and an injection hole plate including an injection hole that injects a resist;

forming a gate line on ~~a~~ the substrate by applying a gate photoresist pattern formed by printing process using the thermal transfer injection nozzle;

sequentially forming a gate insulating layer, a semiconductor layer, and a high-concentrated N+ layer over the gate line;

forming an active region including the high-concentrated N+ layer by applying an active photoresist pattern by printing, wherein the active region is formed by sequentially removing the high-concentrated N+ layer and the semiconductor layer using the active photoresist pattern formed by printing as a mask;

removing the active photoresist pattern;

forming a conductive layer over the active region and the gate insulating layer;

depositing a photoresist layer over the conductive layer;

applying a mask over the photoresist layer, and performing a lithography process, to form a photoresist layer pattern;

~~sequentially~~ removing the conductive layer ~~and the high-concentrated N+ layer above the channel region~~ by using the photoresist layer pattern as a mask to form ~~a source/drain electrodes~~source and drain electrodes;

removing the high-concentrated N+ layer above a channel region by using the phtoresist layer pattern as a mask;

removing the photoresist layer pattern;

forming a passivation layer over the source/drain electrode;

forming a contact hole photoresist pattern over the passivation layer by printing process using the thermal transfer injection nozzle;

removing the passivation layer by using the contact hole photoresist pattern as a mask to

PAGE 5/13 * RCVD AT 3/11/2009 7:35:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):02-26

form a contact hole;

removing the contact hole photoresist pattern;

forming a pixel electrode layer over the passivation layer and the contact hole;

forming a pixel electrode photoresist pattern over the pixel electrode layer by printing process using the thermal transfer injection nozzle; and

removing the pixel electrode layer by using the pixel electrode photoresist pattern as a mask to form a pixel electrode.

~~forming a contact hole in the passivation layer by applying a contact hole photoresist pattern by printing process using the thermal transfer injection nozzle; and~~

~~forming a pixel electrode on the passivation layer by printing a pixel electrode photoresist pattern formed by print process using the thermal transfer injection nozzle.~~

2-14. (Canceled).

15. (Previously Presented) The method of claim 1, wherein the mask applied over the photoresist layer in the step of applying the mask is the only mask applied through out the method of claim 1.

16. (Previously Presented) The method of claim 1, wherein the printing is ink jet printing.

17 - 19. (Canceled)

20. (Currently Amended) A method for forming a liquid crystal display device, comprising:

providing a substrate;

providing a thermal transfer injection nozzle including a resist storing layer for storing an injected resist, a thin film resistor for heating a thin-deposited resist electrically, a vapor heated by the thin film resistor and injecting a resist, and an injection hole plate including an injection hole that injects a resist;

forming a gate line on a the substrate, wherein the step of forming the gate line includes applying a gate photoresist pattern on the substrate by printing process using the thermal transfer

PAGE 6/13 * RCVD AT 3/11/2009 7:35:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):02-26

injection nozzle;

removing the gate photoresist pattern;

forming a gate insulating layer, a semiconductor layer, ~~and~~ an impurity-doped layer and a conductive layer over the substrate including the gate line;

forming an active photoresist pattern over the conductive layer by printing;

exposing a part of the active photoresist pattern on a channel region by using a mask for controlling an optical amount and removing the exposed active photoresist pattern on a channel region to form a stepped active photoresist pattern, wherein a degree of the removed active photoresist pattern is different at time of development according to a degree of exposure to light;

patterning the conductive layer, the impurity-doped layer and the semiconductor layer by using the stepped active photoreist pattern as a mask;

ashing a part of the stepped active photoresist pattern to remove the photoresist pattern on the channel region;

removing the conductive layer and the impurity-doped layer on the channel region to form source and drain electrodes electrically separated from each other;

removing the active photoresist pattern;

~~forming an active region including the impurity-doped layer;~~

~~forming a conductive layer over the active region;~~

~~depositing a photoresist layer over the conductive layer;~~

~~applying a mask over the photoresist layer, patterning the photoresist layer using the mask;~~

~~forming source and drain electrodes using the patterned photoresist layer;~~

~~removing the patterned photoresist layer;~~

~~forming a source electrode and a drain electrode over the active region;~~

forming a passivation layer over the source and drain electrodes;

forming a contact hole in the passivation layer by applying a contact hole photoresist pattern formed by printing process using the thermal transfer injection nozzle; and

forming a pixel electrode on the passivation layer by printing a pixel electrode photoresist pattern formed by printing process using the thermal transfer injection nozzle.

21. (Canceled).

PAGE 7/13 * RCVD AT 3/11/2009 7:35:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):02-26

22. (Canceled)

23. (Previously Presented) The method of claim 20, wherein the step of forming the active region includes applying an active photoresist pattern including the impurity-doped layer by printing.

24. (Currently Amended) A fabrication method of a liquid crystal display device, comprising:

forming a gate line on a substrate by applying a gate photoresist pattern formed by a roller printing process,

wherein the roller printing process includes:

providing a cliché on which a resist is deposited,

contacting a roller with the cliché in which the resist is contained,

rotating a roller on the cliché, to transfer the resist contained in the cliché onto a surface of the roller, and

contacting the roller with the substrate and rotating on the substrate to ~~re-transferring~~ re-transfer the resist onto the surface of the roller;

sequentially forming a gate insulating layer, a semiconductor layer, ~~and~~ a high-concentrated N+ layer and a conductive layer over the substrate including the gate line;

forming an active region including the high-concentrated N+ layer by applying an active photoresist pattern formed by the roller printing process, wherein the active region is formed by sequentially removing the high-concentrated N+ layer and the semiconductor layer using the active photoresist pattern;

exposing a part of the active photoresist pattern on a channel region by using a mask for controlling an optical amount and removing the exposed active photoresist pattern on a channel region to form a stepped active photoresist pattern, wherein a degree of the removed active photoresist pattern is different at time of development according to a degree of exposure to light;

patterning the conductive layer, the high-concentrated N+ layer and the semiconductor layer by using the stepped active photoreist pattern as a mask;

PAGE 8/13 * RCVD AT 3/11/2009 7:35:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):02-26

ashing a part of the stepped active photoresist pattern to remove the active photoresist pattern on the channel region;

removing the conductive layer and the high-concentrated N+ layer on the channel region to form source and drain electrodes electrically separated from each other;

removing the active photoresist pattern;

~~forming a conductive layer over the active region;~~

~~depositing a photoresist layer over the conductive layer;~~

~~applying a mask over the photoresist layer, and performing a lithography process, to form a photoresist layer pattern;~~

~~sequentially removing the conductive layer including the high concentrated N+ layer above the channel region by using the photoresist layer pattern as a mask to source/drain electrodes;~~

~~removing the photoresist layer pattern;~~

forming a passivation layer over the source/drain electrode;

forming a contact hole in the passivation layer by applying a contact hole photoresist pattern formed by the roller printing process; and

forming a pixel electrode on the passivation layer by applying a pixel electrode photoresist pattern formed by the roller printing process.

PAGE 9/13 * RCVD AT 3/11/2009 7:35:02 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):02-26